

WHAT IS CLAIMED IS:

1. An operation support device, comprising:
retaining means in the form of a rod and projected from an automotive vehicle;
5 image taking means mounted on and retained by said retaining means to take
images of objects around said automotive vehicle; and
swing compensation image processing means for processing said images taken by
said image taking means with a swing compensation for a swing on a special distance plane
distant from said image taking means.
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2. An operation support device as set forth in claim 1, in which said swing
compensation image processing means is adapted to detect a rotational swing and a
positional swing of said image taking means mounted on said retaining means by chasing
particular points on said automotive vehicle, and to compensate said image by canceling the
15 effect of said rotational swing and said positional swing of said image taking means on said
special distance plane.
3. An operation support device as set forth in claim 1, which further comprises
detecting means for detecting a rotational swing and a positional swing of said image taking
20 means, and in which said swing compensation image processing means is adapted to
compensate said image by canceling the effect of said rotational swing and said positional
swing of said image taking means on said special distance plane.
4. An operation support device as set forth in claim 1, in which said swing
25 compensation image processing means is adapted to perform a projective transformation of
said taken image to an image projected on a special distance plane before performing an
inverse projective transformation to an image to be outputted as an image taken with no
swing by an imaginary image taking means.
- 30 5. An operation support device as set forth in any one of claims 1 to 4, which further
comprises distance means for detecting a distance between said object and said image taking
means, and in which said swing compensation image processing means is adapted to change
said special distance plane on the basis of said distance between said object and said image
taking means.
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6. An operation support device as set forth in claim 1, in which said swing

compensation image processing means is adapted to produce images compensated on respective distance planes by canceling the effect of said rotational swing and said positional swing of said image taking means on said distance planes, and to select, as an image to be synthesized, one of said images compensated on said respective distance planes by judging whether or not each of said images compensated on said respective distance planes corresponds to an predictive image which is produced from one or more prior images on the basis of a movement of said automotive vehicle.

7. An operation support device as set forth in claim 1, which further comprises oscillation means for swinging said retaining means, and in which said swing compensation image processing means is adapted to detect said special distance plane with the swing of said image taking means under the condition that said retaining means is being swung by said oscillation means.

8. An operation support device as set forth in claim 1, which further comprises displaying means for displaying said image taken by said image taking means.